AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-15. Previously canceled.

16.-21. Canceled.

22.-28. Previously canceled.

29.-30. Canceled.

31. Previously canceled.

32. Canceled.

33. (Currently Amended) An iron compound catalyst for inhibiting the generation of dioxin, consisting essentially of iron oxide particles, iron oxide hydroxide particles or mixture thereof and having not less than ~~15~~18 % by volume of a conversion percentage of carbon monoxide into carbon dioxide,

said iron oxide particles or said iron oxide hydroxide particles having an average particle size of ~~0.01~~0.02 to ~~2.0~~1.0 μm, a BET specific surface area of 0.2 to ~~200~~100 m^2/g, a phosphorus content of less than or equal to 0.02 % by weight, a sulfur content of less than or equal to 0.1 % by weight and a sodium content of less than or equal to 0.2 % by weight,

wherein the conversion percentage is measured by:

(1) heat treating the iron compound catalyst in air at a temperature of 800°C for 15 minutes; and

(2) instantaneously contacting 2.8 x 10^{-4} mol of the heat-treated iron oxide particles with 6.1 x 10^{-7} mol of carbon monoxide at a temperature of 250°C at a space velocity (SV) of 42,400 h^{-1} in an inert gas atmosphere using a pulse catalytic reactor, to measure the conversion percentage of carbon monoxide into carbon dioxide.

34. (Currently Amended) An iron compound catalyst for inhibiting generation of dioxin according to claim 33, wherein ~~the average particle size is 0.02 to 1.0 μm;~~ the BET specific surface area is 0.5 to 100 m^2/g and the phosphorus content is less than or equal to 0.005 % by weight.

35. (Previously Presented) An iron compound catalyst for inhibiting generation of dioxin according to claim 33, wherein the conversion percentage of carbon monoxide into carbon dioxide is at least 20 % by volume.

36. (Previously Presented) An iron compound catalyst for inhibiting generation of dioxin according to claim 33, wherein said iron compound catalyst consisting essentially of aggregates consisting essentially of said iron oxide particles, said iron oxide hydroxide particles or the mixed particles thereof,

said aggregates having a specific surface area of not less than 1.0 m^2/cm^3 when measured under a feed pressure of 1 bar in a dry granulometer, and an average particle size (D_{50}) of 50 % of a total volume thereof, of up to 8.0 μm.

37. (Previously Presented) An iron compound catalyst for inhibiting generation of dioxin according to claim 36, wherein the specific surface area of said aggregates is at

least 1.2 m^2/cm^3 when measured under a feed pressure of 1 bar in a dry granulometer, and the average particle size (D_{50}) is up to 7.0 μm.

38. (Previously Presented) An iron compound catalyst for inhibiting generation of dioxin according to claim 36, wherein said aggregates comprise said iron oxide particles, said iron oxide hydroxide particles or mixed particles of said iron oxide particles and said iron oxide hydroxide particles having an average particle size of 0.02 to 1.0 μm, a BET specific surface area of 0.5 to 100 m^2/g, a phosphorus content of less than or equal to 0.005 % by weight, a sulfur content of less than or equal to 0.1 % by weight and a sodium content of less than or equal to 0.2 % by weight.

39. (Currently Amended) An iron compound catalyst for inhibiting the generation of dioxin, consisting essentially of aggregates consisting essentially of iron oxide particles, iron oxide hydroxide particles or the mixture particles thereof and having a specific surface area of not less than 1.0 m^2/cm^3 when measured under a feed pressure of 1 bar in a dry granulometer, and an average particle size (D_{50}) of 50 % of a total volume thereof, of up to 8.0 μm, and not less than ~~15~~18 % by volume of a conversion percentage of carbon monoxide into carbon dioxide,

said iron oxide particles or said iron oxide hydroxide particles having an average particle size of ~~0.01~~0.02 to ~~2.0~~1.0 μm, a BET specific surface area of 0.2 to ~~200~~100 m^2/g, a phosphorus content of less than or equal to 0.02 % by weight, a sulfur content of less than or equal to 0.1 % by weight and a sodium content of less than or equal to 0.2 % by weight,

wherein the conversion percentage is measured by:

(1) heat treating the iron compound catalyst in air at a temperature of 800°C for 15 minutes; and

(2) instantaneously contacting 2.8 x 10^{-4} mol of the heat-treated iron oxide particles with 6.1 x 10^{-7} mol of carbon monoxide at a temperature of 250°C at a space velocity (SV) of 42,400 h^{-1} in an inert gas atmosphere using a pulse catalytic reactor, to measure the conversion percentage of carbon monoxide into carbon dioxide.

40. (Previously Presented) An iron compound catalyst for inhibiting the generation of dioxin, consisting essentially of aggregates consisting essentially of iron oxide particles, iron oxide hydroxide particles or the mixture particles thereof and having a specific surface area of not less than 1.2 m^2/cm^3 when measured under a feed pressure of 1 bar in a dry granulometer, and an average particle size (D_{50}) of 50 % of a total volume thereof, of up to 7.0 μm, and not less than 15 % by volume of a conversion percentage of carbon monoxide into carbon dioxide,

said iron oxide particles or said iron oxide hydroxide particles having an average particle size of 0.02 to 1.0 μm, a BET specific surface area of 0.5 to 100 m^2/g, a phosphorus content of less than or equal to 0.005 % by weight, a sulfur content of less than or equal to 0.1 % by weight and a sodium content of less than or equal to 0.2 % by weight,

wherein the conversion percentage is measured by:

(1) heat treating the iron compound catalyst in air at a temperature of 800°C for 15 minutes; and

(2) instantaneously contacting 2.8×10^{-4} mol of the heat-treated iron oxide particles with 6.1×10^{-7} mol of carbon monoxide at a temperature of 250°C at a space velocity (SV) of 42,400 h^{-1} in an inert gas atmosphere using a pulse catalytic reactor, to measure the conversion percentage of carbon monoxide into carbon dioxide.